CLAIMS

- 1. A mobile transceiver having:
- 2 a system for generation of position information and means for transmitting said position information.
- The invention of Claim 1 wherein said system for generation of position
 information includes means for receiving a signal from a satellite.
- The invention of Claim 2 wherein said system for generation of position information includes means for receiving a Global Positioning System signal.
- The invention of Claim 1 wherein said system for generation of position
 information includes means for receiving a signal from an airborne platform.
- 5. The invention of Claim 1 wherein said means for transmitting said position information includes a CDMA transmitter.
 - 6. A base station having:
- 2 means for receiving position information from a remote unit and providing a received position signal in response thereto and
- 4 means for directing a beam in response to said received position signal.
- The invention of Claim 6 wherein said position information is provided at
 least in part by a Global Positioning System.
 - 8. The invention of Claim 7 wherein said remote unit is a mobile transceiver.
- The invention of Claim 8 wherein said mobile transceiver is a CDMA
 transceiver.

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- 10 The invention of Claim 8 wherein said beam is directed to said transceiver.
- 11. The invention of Claim 6 wherein said means for directing a beam produces a smart antenna.
- The invention of Claim 11 wherein said means for directing a beam
 includes an antenna array.
- 13. The invention of Claim 12 further including means for driving said arrayto output a directed beam.
- The invention of Claim 13 wherein said means for driving includes a
 beamforming network.
 - 15. A cellular communications system comprising:
 - a mobile transceiver having:
 - a GPS system for generation of position information and
- 4 means for transmitting said position information and
- a base station having:
- 6 means for receiving said position information and providing a received position signal in response thereto and
- 8 means located at said base station for directing a beam in response to said received position signal.
 - 16. The invention of Claim 15 wherein said GPS system is GPS assisted.
- 17. The invention of Claim 15 wherein said means for directing a beam 2 includes a smart antenna.
 - 18. The invention of Claim 17 wherein said means for directing a beam

- 2 includes an antenna array.
- $19. \ \, \text{The invention of Claim 18 further including means for driving said array} \\ 2 \qquad \text{to output a directed beam.}$
- The invention of Claim 19 wherein said means for driving includes a
 beamforming network.
 - 21. A method for effecting directional cellular communications including the
- 2 steps of:

generating position information at a mobile transceiver;

- 4 transmitting said position information;
 - means for receiving said position information at a base station and providing a
- 6 received position signal in response thereto; and
 - directing a beam from said base station to said mobile transceiver in response
- 8 to said received position signal.